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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/774,734

02/09/2004

Wataru Ishikawa

KOY-17

9212

20311

7590

11/09/2006

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EXAMINER

MARTIN, LAURA E

ART UNIT

PAPER NUMBER

2853

DATE MAILED: 11/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/774,734	Applicant(s) ISHIKAWA, WATARU	
	Examiner Laura E. Martin	Art Unit 2853	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 28 August 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 4, and 7-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chatterjee et al. (US 5985984) in view of Noguchi et al. (US 20020065335).

#### **Chatterjee et al. discloses the following claim limitations:**

As per claims 1 and 4: a light curable aqueous resin composition (column 1, lines 12-21 and column 2, lines 20-25) comprising a polymerizable compound, and an aqueous photopolymerization initiator which generates free radicals by active ray (column 7, lines 4-35) and a non-ionic surfactant (column 7, line 65-column 8, lines 23).

#### **Chaterjee et al. does not disclose the following claim limitations:**

As per claims 1 and 4: a polymerizable compound which polymerizes with radical polymerization by water and active ray.

As per claims 7 and 9: jetting onto an unabsorbant recording material.

As per claims 8 and 10: jetting jetting onto an absorbent recording material.

As per claims 11 and 12: the amount of an organic solvent being 0 to 5%.

#### **Noguchi et al. discloses the following claim limitations:**

As per claims 1 and 4: a polymerizable compound which polymerizes with radical polymerization by water and active ray [0002] and [0027].

As per claims 7 and 9: jetting onto an unabsorbant recording material [0012].

As per claims 8 and 10: jetting jetting onto an absorbent recording material [0054].

As per claims 11 and 12: the amount of an organic solvent being 0 to 5% [0123].

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the ink taught by Chaterjee et al. with the disclosure of Noguchi et al. in order to print with an ink jet printer high quality color images.

Claims 2, 3, 5, and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chatterjee et al. (US 5985984) and Noguchi et al. (US 20020065335) and further in view of Owatari et al. (US 6095645).

**Chatterjee et al. and Noguchi et al. do not disclose the following claim limitations:**

As per claims 2 and 5: a non-ionic surfactant is fluorine system surfactant comprising a perfluoroalkyl group in a molecule.

As per claims 3 and 6: the content of the non-ionic surfactant is 10 to 10000 ppm.

**Owatari et al. discloses the following claim limitations:**

As per claims 2 and 5: a non-ionic surfactant is fluorine system surfactant comprising a perfluoroalkyl group in a molecule (column 3, lines 64).

As per claims 3 and 6: the content of the non-ionic surfactant is 10 to 10000 ppm (column 4, line 7).

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It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the ink taught by Chaterjee et al. as modified with the disclosure of Owatari et al. in order to provide a stable ink composition.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura E. Martin whose telephone number is (571) 272-2160. The examiner can normally be reached on Monday - Friday, 7:00 - 3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen D. Meier can be reached on (571) 272-2149. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Laura E. Martin

  
11/7/06  
**MANISH S. SHAH**  
**PRIMARY EXAMINER**

Application/Control Number: 10/774,734  
Art Unit: 2853

Page 5

**Specification:**

**Page: 1:**

Line: 6 changed " \_\_\_\_\_ " to --09/770,814--; changed "(Docket 81820) filed of even date herewith" to --filed January 26,2001--,

Line: 8 changed " \_\_\_\_\_ " to --09/771,191--; changed "(Docket 82109) filed of even date herewith" to --filed January 26,2001--,

Line: 10 changed " \_\_\_\_\_ " to --09/770,429--; changed "(Docket 82110) filed of even date herewith" to --filed January 26,2001--,

Line: 12 changed " \_\_\_\_\_ " to --09/770,782--; changed "(Docket 82111) filed of even date herewith" to --filed January 26,2001--,

Line: 14 changed " \_\_\_\_\_ " to --09/771,189--; changed "(Docket 82133) filed of even date herewith" to --filed January 26,2001--,

Line: 16 changed " \_\_\_\_\_ " to --09/770,433--; changed "(Docket 82134) filed of even date herewith" to --filed January 26,2001--,

Line: 18 changed " \_\_\_\_\_ " to --09/770,807--; changed "(Docket 82138) filed of even date herewith" to --filed January 26,2001--,

Line: 20 changed " \_\_\_\_\_ " to --09/770,728--; changed "(Docket 82139) filed of even date herewith" to --filed January 26,2001--,

Line: 22 changed " \_\_\_\_\_ " to --09/770,127--; changed "(Docket 81817) filed of even date herewith" to --filed January 26,2001--,

Line: 24 changed " \_\_\_\_\_ " to --09/770,781--; changed "(Docket 81818) filed of even date herewith" to --filed January 26,2001--,

Line: 26 changed "\_\_\_\_\_" to --09/771,251--; changed "(Docket 81821) filed of even date herewith" to --filed January 26,2001--,

Line: 28 changed "\_\_\_\_\_" to --09/770,122--; changed "(Docket 81893) filed of even date herewith" to --filed January 26,2001--,

Page: 2:

Line: 1 changed "\_\_\_\_\_" to --09/772,097--; changed "(Docket 81894) filed of even date herewith" to --filed January 26,2001--,

Line: 3 changed "\_\_\_\_\_" to --09/770,431--; changed "(Docket 81983) filed of even date herewith" to --filed January 26,2001--,

The following examiner's amendment is provided to correct the abstract in accordance with MPEP 608.01(b).

The application has been amended as follows:

**Abstract:**

Line: 3 changed "comprising" to --including--.

Line: 6 changed "comprising" to --including--.

Line: 8 changed "comprising" to --including--.

Line: 11 changed "comprising" to --including--.